



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

PROCEEDINGS
OF
THE STATISTICAL SOCIETY OF LONDON.

VOL. 1.	1835—1836.	No. 6.
---------	------------	--------

May 16, 1836.

Sir Charles LEMON, Bart., M.P., President, in the Chair.

The Hon. George Harris, of Belmont, Faversham ; C. T. Harrison, Esq., of York Terrace, Regent's Park ; John Henneker, Esq., of the Middle Temple ; and Samuel Solly, Esq., of Upper Gower Street ; were elected Fellows of this Society.

The following Papers were read :—

I. “ Observations on the means of collecting information on various points of Statistics, explanatory of a proposition for the appointment of a Committee to consider the expediency of opening Books for the contemporary record of various Statistical facts, and to prepare the forms in which such Books shall be kept.” By the Right Hon. Holt Mackenzie, Vice President.

The Author began by remarking that the perusal of Mr. Jacob's paper relative to the collection, concentration and diffusion of the Statistical knowledge to be drawn from the sources which he has pointed out, naturally directs our attention to the various other fields from which the materials we desire to provide, may be gleaned in this and other countries. He stated that in considering this subject, the thought had often occurred to him how much valuable Statistical matter is to be found at our feet, and in the

ordinary paths of life, if we will only gather it in time ; but which if not promptly and systematically collected, may in a few years be altogether lost. It was, he said, almost ludicrous to think how much doubt and debate among philosophers could probably be settled by the most ignorant peasant or humble artisan, if the dead of a thousand years could be summoned to life again. But it was melancholy to reflect on the scantiness and uncertainty of the materials offered to the historian for that most important and interesting part of history which should exhibit the conduct and fortune of nations in the circumstances of social life. Every one indeed who had attempted to prosecute Statistical enquiries relative to past ages, or had studied the works that treat of such speculations, must, he thought, have been struck with the difficulty of getting, fully and accurately, for any considerable series of years, things which at the time of their occurrence, were known to all the world. Even when the desired particulars have been preserved, the search for them is generally painful, and the authority often doubtful, because they are recorded without method, scattered through a variety of works, and sometimes received without examination. In support of this truth he observed that we need not refer exclusively to the disquisitions of the Antiquarian. It meets us equally in treatises on subjects of immediate practical application ; and in the very Council of the Society it would be alike attested by the historian of the middle ages, and by him who has instructed us in the causes that have produced variations of price in more recent times. He thought it scarcely necessary to dwell upon the value of the matter that has been lost by the want of contemporary record. We might judge of it by the importance we attach to the fragments that remain. How interesting, were the minutest particulars of the private life of those who have been famous in past ages : how valuable should we reckon the daily journal, or the household accounts of one of the heroes, civil or military, of ancient story ! How precious above all would such records be, as should exhibit the condition of the human race or of any of its great families, in the different stages of their progress, rise or decline ! When Pompeii was disinterred, how eagerly did we catch at every thing that tends to show the wants of common life, and the arts by which they were provided ! When Egypt rendered up the secrets of her tombs,

how delighted did we turn to those memorials that indicate the condition and occupations of the people ; and what would we not give for such Statistical accounts as should complete the picture ! Now, he argued, we shall be in our turn ancients ; and although we might not be sanguine in estimating the probable success of any attempt to anticipate and satisfy the enquiries of posterity (the prodigious power of printing notwithstanding), yet the effort could scarcely fail to be advantageous, in preserving facts that would otherwise be lost even in our own time ; in leading to useful trains of enquiry, and in rendering easy of access much knowledge now wholly inaccessible.

After various remarks on the duty of the Society as Pioneers of the enterprize and speculation of the Statesman and the Philosopher, explanatory of his opinion that whether in collecting fresh matter, or in fashioning for use that which has already been collected, it was necessary for the Society to take upon itself the preparation of works in a way not usual with other Scientific Associations,—the Author proceeded to urge the immediate consideration of the measures to be taken for supplying the dearth of knowledge touching “ facts calculated to illustrate the condition and prospects of Society,” which we all deplore in relation to past ages. For the present he proposed to pass over points on which the difficulties of contemporary enquiry were considerable, or on which we must seek for the aid of Government, or trust to arrangements of a general nature, which the Government of the country could alone enforce. He would confine himself to matters lying within the reach of every one ; observing that important as is the consideration how to acquire a knowledge of things which elude research, it is scarcely of less moment that means should be taken for collecting, digesting and preserving facts that readily present themselves ; and further remarking that if these were systematically contributed by the persons who, in their several spheres, have cognizance of them, the range of authoritative investigation would be greatly narrowed. Proceeding to consider the question on what principle, and with what view such contributions should be sought, or offered, he submitted generally that the object should be to do for posterity what we wish our ancestors had done for us ; and that in the hope of the Statis-

tical Society being perpetual, that we should regard as valuable, and worthy of being laid up in store, whatever would acquire value with the prolonged course of its existence. We should, in other words, realize the probable wishes of the men of the year two thousand : reflecting on our own speculations regarding the present and all preceding ages. In following up this principle, he first briefly directed attention to the importance of examining and arranging public documents, of which the flood threatens to overwhelm us, with a view to facility of reference and of comparison for extended periods ; or, what is more important, for the correction, while it is yet time, of errors arising from accident, or from variations in statements nominally identical, but really prepared on different principles ; remarking the jealousy with which the deductions of political arithmetic required to be watched ; specifying some of the tests that might be applied to statements of general interest, or generally received authority ; and stating instances of inaccuracy or incompleteness in financial statements, that had been admitted without question, as they had been prepared doubtless without the slightest purpose of unfairness.

He then observed that if we acted upon the principle of seeing that all Statistical facts are preserved which it is likely that posterity will desire to know regarding the past and present times, we should find much matter to be added to that with which the records of the public offices would supply us. So much, indeed, would present itself with little or no labour of collection, that the questions of selection, condensation and arrangement, appeared to require very deliberate consideration ; for the attention of the Society would not be confined to one place or one country, but would be extended to as many places and countries as could be conveniently brought under contribution : among the most curious points to be ascertained, being, in regard to many things, the differences which arise in different situations out of natural or artificial causes, or from circumstances of a mixed nature. And, in concluding this part of his subject, the Author stated that with the above sentiments, it had appeared to him that it would be very useful to open a set of Registers for the following matters, and to invite Societies and Individuals in various parts of this, and other countries, to do so likewise : it being, of course, to be understood that the authority relied upon should, in all cases, be stated.

Prices of all Articles—Wholesale and retail.
 Wages of labour, skilled and unskilled, with notices of its efficiency.
 Average earnings of labour.
 Prices of Piece-work.
 Salaries of Office.
 Fees of Official and Professional men.
 Cost of Education in Schools and Colleges.
 Weights and Measures.
 Weight and Standard of Coins, with notice of Mint Laws.
 Relative value of Gold and Silver, in Coin and in Bullion.
 Interest of money—Loans—Discounts—with notice of Legal maximum.
 Prices of Stock.
 Dividends, and Market value of Shares, in Banks and other Joint Stock Associations.
 Bank Issues and Deposits.
 Exchanges.
 Freights.
 Insurances.
 Rates of Carriage—by land—by water—for goods—for persons, with notice of usual time of transport.
 Details of management in successive years for individual Farms.
 Meteorological Observations as affecting Crops.
 Income and Expenditure of different Classes—Wealthy—Comfortable—Poor.

He explained that he had offered the above detail chiefly to make his meaning clear, and to shew the scope of the proposal he had submitted: observing that other things would probably occur to the minds of others; that some of the items might appear superfluous; that it was by no means necessary that all should be attempted at once; that if the plan were commenced systematically, it would, he hoped, be made to proceed with little or no effort; that for some of the items a few sheets of paper might serve for a century; and lastly, that there could be no hope of succeeding in the general scheme of the Society, if its members suffered themselves to be appalled by the magnitude of the work before them.

Mr. Mackenzie then proceeded to add a few explanatory remarks. He observed, in the first place, that although he had

chiefly adverted to the collection of facts as they now exist, or may hereafter arise, he would by no means exclude or undervalue contributions from ancient stores. On the contrary, he should estimate highly, and should anxiously desire to combine with the record of the present and the future, the result of those investigations which it has been proposed to carry back to remote ages. The reading of many of the Members of the Society, and the private or professional relations of others, might probably, he thought, enable them to afford it materials of much value; and their assistance might not unreasonably be hoped for, when they knew that the Society was prepared systematically to digest and arrange what they should be the means of furnishing. Attention should naturally first advert to works professedly treating of Statistics: but he imagined that even the most elaborate of these still left much to be supplied. He quoted Hallam's history of the Middle Ages, where that Author, after stating the importance of accurate information as to the relative value of money, and the imperfection of that furnished by historians, observes as follows: "It is no longer necessary to lean upon such uncertain witnesses. During the last century a very laudable industry has been shewn by Antiquarians in the publication of account-books belonging to private persons, registers of expenses in Convents, returns of markets, valuations of goods, tavern bills, and in short, every document however trifling, by which this important subject can be illustrated." Adding, "A sufficient number of such authorities, proving the ordinary tenor of prices, rather than any remarkable deviations from it, are the true bases of a Table by which all changes in the value of money should be measured." And concluding, "I have but little doubt that such a Table might be constructed from the materials which we possess, with tolerable exactness, sufficient at least to supersede that often quoted by Political Economists, but which appears to be founded on superficial and erroneous enquiries." Now since the above extract was written, nothing, Mr. Mackenzie believed, had been done of the nature of the work indicated by Mr. Hallam. This, then, the Statistical Society should labour to supply, and it might doubtless hope to obtain from private channels, means of accomplishing the undertaking, beyond those immediately contemplated by that Author. It was probable, indeed, that much valuable matter would be found already collected and arranged in

documents prepared without any view to science—things brought together for partial or temporary purposes, being frequently of general and permanent interest. Thus the *Chronicon Pretiosum*, so often quoted, is said to have been written for the purpose of proving that a College Statute passed between the years 1440 and 1460, by which fellowships were to be vacated on the acquisition of an estate of 5*l.* per annum, might be legitimately evaded. The Parliamentary proceedings of later days abound in Statistical materials, which the Society must endeavour to turn to use, though its labour might sometimes resemble that of searching in the bed of a mountain-torrent for a few grains of precious metal, amidst a vast mass of barren sand. And in this, as in other cases, a thousand sources of information would open to the enquirer, which it would be vain to anticipate before commencing enquiry.

With respect to the means of getting the knowledge which we desire to record, it was, Mr. Mackenzie remarked, unnecessary at present to enter upon any detailed explanation. Every Member of the Society could be useful in suggesting points of enquiry, and sources of information; and they should recollect that statements which were not quite correct as to actual results, might yet be very useful in exhibiting the relation of things belonging to different times or places; and further, that just in proportion as our authorities might be (as some of the Price Currents are said to be) liable to question, was it desirable that they should be examined at the very time of their publication.

He then drew the attention of the Society to the necessity of keeping in view certain points, in order that entries relating to different times and distant countries might be susceptible of fair comparison: specifying the weight of grain when prices are expressed in measures of capacity, and its outturn in meal or flower: the bulk of cattle when we have returns by the head: the conditions on which labourers were hired: the efficiency of labour in producing a given result, contrasted with supposed lowness of wages, whether arising from moral or physical causes or from the tools employed. On this last point he observed that when we consider the exceedingly low wages of our Indian servants and workmen, it is no more reasonable to infer that labour is proportionately cheap in that country, than it would be to assume that

we could always economise the operations of the manufacturer or farmer by employing children in preference to men. With the effects of machinery, all, he stated, are familiar ; but the differences arising from other causes were also important. Thus, in ship-building, if he recollected rightly, the efficiency of the European as compared with the Bengalee, has been stated as 6 to 1, the tools employed being the same : the Chinaman as 3 or 4 to 1. So, in other trades the multitude of persons to be employed or the length of time spent in producing a given effect, would be found to outweigh or nearly counterbalance, the most remarkable differences of rate. In some cases the result is to be attributed partly to the moral or physical character of the labourer, and partly to the tools he uses, and the latter depending sometimes on prejudice, are in fact influenced by the former. Mr. Mackenzie added that we need not look abroad for examples. We have lately been informed that the Irish tillers of the soil, poorly as they are paid, receive a larger share of the produce of their labour than falls to the lot of the comparatively comfortable agriculturist of England ; and probably similar results could be greatly multiplied. The effect indeed of machinery in agriculture was considered by the Author to be not less worthy of remark, though less striking than in manufactures. It was perhaps even more important to the mass of mankind as influencing the cost of labour at which food is to be procured ; and few things he thought could be more interesting than such a comparison of agricultural operations in remote ages or in distant countries in different stages of civilization, as to shew clearly the labour expended in producing a given result, and the relative efficiency of the labourers, of which the money prices of their produce afford us no certain criterion. It was the more desirable to notice the matter because there seems reason to think that an inadvertance to it is one of the causes of the comparatively slow interchange of agricultural improvements. In how many countries have they acted and still act as if the form of the Plough were unimportant ! What a waste of labour do we incur in India by the non-use of so simple a machine as the wheelbarrow !

Mr. Mackenzie next adverted briefly to the effects of a seignorage on the coin as influencing the value of bullion and exchanges : to the usury laws with special reference to India, in which with a legal maximum of 12 per cent., the Government borrows at five, and

accounts between individuals of approved credit are adjusted at six, while the great bulk of the Agricultural produce of the country is raised upon advances rarely charged with less than 24 per cent. He proceeded in the next place to urge the importance of procuring details regarding the management of individual farms regularly recorded for successive years, observing that in no other way could we really trace the progress of Agriculture, or fully understand its state in different countries. It would be very desirable to get the result of actual accounts containing an accurately balanced statement of expenditure and return. But even a statement of rents alone for a long series of years, care being taken to ascertain that the subject-matter of enquiry is the same, would be very curious and valuable. He had understood that rentals of the time of the Protectorate were to be had in Scotland, connected with the settlement of tythe in that country, assumed to have been generally equal to one-fifth of the rent, the latter being taken as equivalent to half of the tytheable produce : and he was informed that the ratio of the rents of that time to those of the present day, is very frequently found to be as one to twelve.

He would only say one word as to the "Income and Expenditure of different classes." It struck him that we are too apt to confine our enquiries to the poor. Now, he thought their condition must be greatly influenced by the habits of the rich : and as these change with the progress of society and materially influence that progress, he could not be wrong in considering that statements which should exhibit the objects on which the wealth of the higher orders in different countries, and in different times, is employed, would form a legitimate and highly interesting branch of that knowledge which it is the purpose of the Statistical Society of London to procure. He felt the more interest in this head of enquiry, because the country with which he was long and happily connected, affording us the opportunity of calling up the forms of remote ages in the contemplation of the present, might probably present many curious and important views of social life.

Mr. Mackenzie concluded by stating that it was not his present intention to enter into any detail as to the form of the proposed registers, but he would suggest that the whole subject should be considered by a Committee, if the general notions

which he had submitted, were deemed worthy of attention. The Society would find in different publications various Tables relating to the most important heads, from which it could scarcely choose amiss: the main point being the clear expression of all that it might be desirable to record; and the first thing to be settled seemed to him to be the matter to be collected, the sources of information to be sought, and the periods and places to be distinguished. He would also add that in this, and in other questions, touching the mode of procedure, he would be greatly influenced by the disquisitions of historians on the state and progress of society; by the speculations of authors who have written on other branches of Political Economy, and by the debates of Statesmen on points that depend for their just solution upon Statistical facts: for although it was no business of the Society to maintain or impugn general theories, its duty in regard to them being simply to collect and arrange the facts from which they may be constructed, and by which they ought all to be tried, yet it seemed to him (Mr. M.) to be scarcely possible to distinguish what is worthy of preservation, or to determine how the Society's acquisitions should be arranged, without some advertence to the general principles discussed by theoretic reasoners.

II. "Observations on an improved System of Farm Book-keeping, as practised by Alexander Trotter, Esq., of Dreghorn, on two farms situated near Edinburgh." By Alexander Trotter, Esq.

This communication, as was stated in a prefatory letter addressed by Mr. Trotter to the Secretary, consisted of a series of Tables exhibiting an account of the produce raised on the Colinton and Dreghorn farms situated near Edinburgh, from the year 1825 to the year 1833, inclusive, as well as of the prices obtained for each description of crop, and of the expenses incurred during that period. They were accompanied by some observations on the means employed to collect and methodize such of the facts, thus submitted to the Society, as related to the subject of the expenses incurred; and on the necessity of a systematic arrangement in their accounts being observed on the part of farmers and others employed in Agricultural pursuits, to render available to Statis-

tical purposes such information as they might wish to supply on this subject.

The details in these Tables would, it was observed, afford much ground-work for further remarks, as the fluctuations in the annual profit on the farms, which they present, were very remarkable. This might be traced to the striking variations which appeared to have taken place not only in the actual quantities of any one particular description of produce raised in one year, as compared with other years, but in the relative proportions also which different descriptions of produce bear in different years to each other—a variation in which no regulating law seemed to prevail, but respecting which it would nevertheless be desirable that facts deduced from more extended observations should be collected; as with more extensive data, the causes of these variations, and their effects upon prices, could possibly be reduced to some rule, if the investigation were undertaken by some one competent to the task; in which case the result could scarcely fail to be productive of practical advantage to the science of Agriculture. Being himself unacquainted with such subjects, Mr. Trotter added, that he could only throw out the suggestion to those who, to accomplish this end, would take the trouble to compile similar Tables on a more extensive scale.

He then proceeded to quote a paragraph from Blackwood's *Journal of Agriculture*, which he considered to be one especially deserving of attention. A fact was there asserted of great importance to the agricultural community—a class constituting a very large portion of the total population of the country—viz. that while all their competitors in productive industry have lowered the expenses of production in the several branches of it to which they have directed their energies, the agriculturists alone have not done so; have indeed not only failed to reduce the expenses incidental to the cultivation of their land, but have greatly increased them.

Though it would be beyond the scope of the Statistical Society to examine into the adequacy of the causes referred to, to account for the deviation, in this case, from the common rule, yet the Author thought that it was peculiarly within its province to ascertain whether the assertion be true that our tenantry is reduced

to the state described, in order that, if well grounded, attention might be turned to the remedy of so great an evil, or, if unfounded, that an untruth might be exposed which was so calculated to mislead the public and to afford a specious handle to discontent.

The following remarks would not, however, take so wide a range as an attempt to investigate this subject would require—the facts even were very few, which were now offered, to assist in the determining of the simpler question, “Whether the expenses of carrying on the operations of a farm are greater now or not than they were some years ago,” as they consisted of the results shewn by a set of farm books kept only since the year 1825, on two farms situated near Edinburgh, each consisting of 170 acres.

These results were presented in a tabular form and exhibited in addition to an account of the expenses incurred on each farm, a statement of the produce raised, and of the prices obtained for each description of crop, from the year 1825 to the year 1833, inclusive.

One of these farms, the one situate at Dreghorn, was described as being at a considerably higher elevation than the other, and it might be necessary for any one examining the details of these Tables to bear in mind the difference of local position to account for the less regular proportion which the expenses on the higher situated farm bear to the quantity produced upon it as compared with the lower one; but on referring to either it would be seen that no regular or considerable increase in the expenses had taken place.

On the Colinton Farm, for example, the expenses in the year 1825 amounted to 1,178*l.* 6*s.* 0*d.*, while on the average of nine years the annual expense on that farm had been 1,215*l.* 14*s.* 2*d.*, an increase only of about 3 per cent. Even here, however, there had not been a permanent or constant increase, as the average for the whole time had been unduly raised by the circumstance of the farm having been taken into the owner's own management in the year 1825, when in a state that required a considerable extra expenditure, to bring it into proper order, and which raised the expenses during the years 1826-7 and 8 to 1,313*l.* 3*s.* 2*d.*,

1,300*l.* 10*s.* 8*d.*, and 1,356*l.* 4*s.* 8*d.* respectively. In 1829 the expenses had again fallen to what they had been in 1825, or rather to a fraction below it, viz. to 1,178*l.* 10*s.* 11*d.* In 1830 and 1831 the expenses were still lower, being for those years 1,159*l.* 2*s.* 2*d.* and 1,171*l.* 14*s.* 4*d.* respectively. In 1832 they rose to 1,215*l.* 6*s.* 2*d.*, but which was still below the average; and in 1833 they fell to 1,068*l.* 9*s.* 4*d.*, being the minimum of the nine years, and about 12 per cent. below the average.

It might, Mr. Trotter continued, appear that the experience on so small a farm during the short period of nine years could not be referred to with confidence to establish any conclusive result on the point under consideration; and the truth of this was admitted. But if the field of observation from which the above data are obtained is confessedly too limited to allow of an approach even to generalization, still he was of opinion that, from the mode adopted in the construction of the Tables referred to, they contain the *principle* on which this question may best be solved; and it was from this consideration more than from the importance of the results shewn, that he thought it might be useful to draw the attention of the Society to them; and more especially to the means which had been employed to collect and methodise the information now laid before it; as the subject having long been the peculiar study of the Gentleman who organized the system of the Books whence these abstracts are taken, he felt he might confidently offer them as a guide to others who may have a larger field to work upon.

The importance of this would be apparent if it were considered how difficult it is to obtain accurate information on the subject from those practically engaged in Agriculture.

This was considered to arise from the circumstance of few farmers introducing a sufficiently accurate classification into their accounts, to enable them to distinguish those expenses on a farm, during any one year, which are necessary and constant, from those which are accidental only; while still fewer are able to keep distinct those expenses which properly belong to any one year, and should attach to the crop of that year, from those which in reality should either be included as a charge on the crop of the preceding year, or be carried forward and be included as a charge on the crop of the following year.

A little consideration, he observed, would shew that a system of Farm Book-keeping to be really of service to the cause of Statistics, ought to provide for the distribution of the current expenses of a farm over a period of at least three years ; because a considerable portion of the expenses which are being incurred at any given time on a farm will arise from the thrashing out and otherwise preparing, or from carrying to market, and disposing of the last year's crop ; and another large proportion from the preparing the crop to be taken in the following year from the fields which are at the time in fallow, and which will require the expense of manure, &c.,—an expense which will yield no return until the crops on which it is laid out are brought to market in the following, or even in the second year, and which crops ought therefore, in fairness, to be charged with it.

But if the professional farmer was seldom competent to supply accurate data on the subject, the gentleman farmer, unless thoroughly acquainted with accounts, was liable to fall into a still more serious error, by mixing up with expenses properly chargeable to his farm, those incurred from improvements on his estate, or even in the embellishment of his grounds.

It was considered evident, that from any system of accounts which does not exclude these two sources of error, a collector of statistical facts might, without great care, draw many inferences on which no perfect dependence ought to be placed, or become the recorder of facts which would have a tendency to mislead rather than to convey useful information.

It would have occupied too much time to attempt to point out in detail the means which are made use of in the books whence these abstracts are taken, to classify the expenses of the farm ; but the whole of the forms used were laid upon the table of the meeting, and were submitted to the after-inspection of those who might feel an interest in the subject.

The Author thought that it would only be necessary to remark generally in regard to the distribution of the expenses incurred in any one year, over the three crops which share in the benefit of the expenditure, that the distribution is chiefly necessary with re-

spect to that portion of the expenses which arises from the employment of labour, and that the forms made use of for the purpose of ascertaining how this expense ought to be apportioned, are so contrived and have such instructions annexed to them, that the putting into execution of these instructions by the head ploughman, in whose keeping they are, is reduced to a merely mechanical operation, consisting in the describing of certain figures or marks in a horizontal line appropriated to each working day in the year. Such at least is the nature of the form applicable to what is called the *yearly work* of the ploughmen and horses ; that is to say, to the work of the *yearly* servants on the farm.

The labour of those employed as *Day-labourers* would be seen by an inspection of the form applicable to their more varied occupations, to be capable of an equally simple registration, notwithstanding this greater diversity of their occupations.

In the operations of a farm in a high state of cultivation, and requiring a regular expenditure only in the repairs of farm offices, and in the keeping up of hedges and drains, and where the proportion of fields in fallow does not vary much from year to year, such a distribution of expenses, as is here spoken of, over the several crops, would be less necessary, because the proportion chargeable to each crop remaining constant, the results in a series of years would be the same as if the whole expense of one year were charged to the crop of that year. But this is seldom the case in any farm, and still less will this average charge be correct in the case of an extensive estate farmed by the owner, who will naturally, in almost every instance, lay out money in improving and, possibly, in beautifying it.

The labour too, of the men employed on a gentleman's estate, will be frequently directed to the repairing of fences, and to the draining of those parts which are merely ornamental, or in repairs of the dwelling-house or of the house offices.

By an examination into the detail of one year of the accounts of the Dreghorn Estate it appeared that 5-13ths only of the sum expended in the wages of day labourers was really spent on the farm attached to the house grounds. Now, as this was a proportion that could not be guessed at, and which would never re-

main for two years the same, Mr. Trotter was of opinion that it was only by a most accurate classification of such expenses that any degree of information worth recording could be obtained ; and yet without method the difficulty attending the abstracting of a complicated account would be so great as to deter most people from attempting it, especially if it had to be delayed till the end of the year.

He concluded by observing that it was from the fitness, therefore, of the accompanying forms, which effect the abstract from *day to day*, that attention was thus wished to be directed to them as a most powerful instrument for the attainment of information on a very important branch of statistical enquiry.

The following is a recapitulation of the annual general results as shewn by the Tables alluded to in this communication.

COLINTON FARM.

Years.	Number of Acres.			Gross Receipts.			Expenses of Crops.			Profit or Rent.			Average Profit or Rent per Acre.		
	A.	R.	F.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
1825	170	0	0	2079	8	6 $\frac{3}{4}$	1178	6	0	901	2	6 $\frac{3}{4}$	5	6	0
1826	170	0	0	2484	4	1	1313	3	2	1171	0	11	6	17	9
1827	170	2	0	1675	10	3	1300	10	8	374	19	7	2	5	9
1828	170	2	0	1989	9	10 $\frac{1}{2}$	1356	4	7 $\frac{3}{4}$	633	5	2 $\frac{3}{4}$	3	8	5
1829	170	2	0	1962	4	3	1178	10	11	783	13	4	4	9	3
1830	170	2	0	1957	7	4 $\frac{1}{2}$	1159	2	2 $\frac{1}{2}$	798	5	2	4	13	7 $\frac{1}{2}$
1831	170	2	0	1782	6	9	1171	14	4	610	12	5	3	11	7 $\frac{1}{2}$
1832	170	2	0	1721	12	4 $\frac{1}{2}$	1215	6	2	506	6	2 $\frac{1}{2}$	2	19	4 $\frac{1}{2}$
1833	161	1	0	1613	10	1 $\frac{1}{2}$	1068	9	4 $\frac{1}{2}$	545	0	9	3	7	7
Yearly } Aver. }	169	1	18	1918	8	2	1215	14	2	702	14	0	4	2	1 $\frac{3}{4}$

DREGHORN FARM.

Years.	Number of Acres.			Gross Receipts.			Expenses of Crops.			Profit or Rent.			Average Profit or Rent per acre.		
	A.	R.	F.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
1825	170	1	4	1237	19	10	551	9	5	686	10	5	4	0	9
1826	170	1	4	1273	13	7 $\frac{1}{2}$	616	10	6 $\frac{1}{2}$	627	3	1	3	12	9 $\frac{1}{2}$
1827	170	1	4	1237	5	9 $\frac{1}{2}$	896	16	10 $\frac{1}{2}$	340	8	11	2	0	0 $\frac{1}{2}$
1828	170	1	4	1035	8	10	520	4	8	515	4	2	3	0	7 $\frac{1}{2}$
1829	170	1	4	916	16	8	606	1	9 $\frac{3}{4}$	310	14	10 $\frac{1}{2}$	1	16	6 $\frac{1}{2}$
1830	170	1	4	1044	8	7 $\frac{1}{2}$	753	6	9	291	1	10 $\frac{1}{2}$	1	14	2 $\frac{1}{2}$
1831	170	1	4	1051	13	3 $\frac{1}{2}$	737	19	10 $\frac{1}{2}$	313	13	5	1	18	3
1832	170	1	4	1027	6	7	728	11	11	298	14	8	1	15	1
1833	170	1	4	997	19	10 $\frac{1}{2}$	655	13	9 $\frac{1}{2}$	312	6	1	1	16	8
Yearly } Aver. }	170	1	4	1091	8	2	680	15	1	410	13	1	2	8	4